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**AMENDMENTS TO THE CLAIMS:** 

Amend the claims as follows:

Claims 1-36 (cancelled).

37. (Currently Amended) An immunoassay kit comprising a solid phase coated

with an HCV NS3 protein wherein said immunoassay kit has been produced by a

method comprising the steps of sulphonation of said HCV NS3 protein and subsequent

desulphonation adding a reducing agent in at least one of the following steps:

(i) for an ELISA kit: the steps of coating of said solid phase with said HCV NS3

protein antigen and/or fixation of the HCV NS3 proteins coated on said solid phase;

(ii) for a Line ImmunoAssay kit: the steps of blocking said solid phase and/or

washing of said solid phase coated with said HCV NS3 protein; and

(iii) optionally, for the ELISA kit of (i) in the steps of blocking said solid phase

and/or the pretreatment step of said solid phase, and for the Line Immunoassay kit of

(ii), in the steps of fixation coating of the HCV NS3 proteins coated on said solid phase;

and/or the (iv) pretreatment step of said solid phase.

38. (Currently Amended) An immunoassay kit according to claims 36 or 37

wherein said HCV NS3 protein is produced by a method comprising the steps of

sulphonation and subsequent desulphonation is performed in the presence of a

reducing agent.

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39. (Currently Amended) The immunoassay kit according to any of claims 36 to

37 wherein said HCV NS 3 protein [[is]] comprises an HCV NS3 amino acid sequence

selected from the group consisting of SEQ ID NO:3-18.

40. (Currently Amended) The immunoassay kit according to any of claims 36 to

37 wherein said HCV NS3 protein is contained in a fusion protein.

41. (Previously Presented) The immunoassay kit according to claim 39 wherein

said HCV NS3 protein is contained in a fusion protein.

42. (Withdrawn) The immunoassay kit according to claim 40 wherein said fusion

protein is selected from the group of amino acid sequences consisting of SEQ ID

NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30

and SEQ ID NO:32.

43. (Withdrawn) The immunoassay kit according to claim 41 wherein said fusion

protein is selected from the group of amino acid sequences consisting of SEQ ID

NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30

and SEQ ID NO:32.

Claims 44-61. (Canceled)

62. (Currently Amended) The immunoassay kit according to any of claims 36-37

38 wherein said HCV NS3 protein is additionally treated with a zwitter-ionic detergent.

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63. (Previously Presented) The immunoassay kit according to claim 62 wherein said HCV NS3 protein is treated with *n*-dodecyl-N,N-dimethylglycine as zwitter-ionic detergent.

Claims 64-71. (Canceled)

- 72. (Currently Amended) The method immunoassay kit according to claim [[64]] 37 wherein said desulphonation is performed in presence of a reducing agent is selected from DTT, DTE or TCEP.
- 73. (Currently Amended) The method immunoassay kit according to claim 72 wherein said reducing agent is used in a concentration range of 0.1 mM to 1 M.

Claims 74-76. (Cancelled)

- 77. (Currently Amended) The immunoassay kit according to claim <u>37</u> [[76]] wherein said solid phase further comprises at least one of a positive control and a +/-cutoff control.
- 78. (Currently Amended) The immunoassay kit according to any of claims 36 to 37, said solid phase further comprising at least one additional HCV antigen selected from the group consisting of an antigen of the Core region, an antigen of the E2 hypervariable region, an antigen of the NS4A region, an antigen of the NS4B region, and an antigen of the NS5A region.
- 79. (Withdrawn Currently Amended) A method for producing an immunoassay kit comprising a solid phase coated with an HCV NS3 protein according to claim 64

wherein the desulphonation is performed in wherein a reducing agent is added in at least one of the following steps:

- (i) for an ELISA kit: the steps of coating of said solid phase with said HCV NS3 proteinantigen; and/or fixation of the proteins coated on said solid phase;
- (ii) for a Line Immunoassay kit: the steps of after (i), blocking said solid phase; and/or washing of said solid phase coated with said HCV NS3 protein; and
- (iii) optionally, for the ELISA kit of (i) in the steps of blocking said solid phase and/or the pretreatment step of said solid phase, and for the Line Immunoassay kit of after (ii), in the steps of fixation coating of the HCV NS3 proteins coated on said solid phase[[:]] and/or the (iv) after (iii), pretreatment step of said solid phase.
- 80. (Currently Amended) The immunoassay kit method according to claim [[38]] 79 wherein said HCV NS 3 protein [[is]] comprises an HCV NS3 amino acid sequence selected from the group consisting of SEQ ID NO:3-18.
- 81. (Currently Amended) The immunoassay kit method according to claim [[38]] 79 or 80 wherein said HCV NS3 protein is contained in a fusion protein.
- 82. (Currently Amended) The immunoassay kit method according to claim [[80]] 79 wherein said HCV NS3 protein is contained in a fusion protein produced by a method comprising the steps of sulphonation and subsequent desulphonation.

Claims 83-86 (Canceled)

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87. (Currently Amended) The immunoassay kit method according to claim [[38]]

82 wherein said HCV NS3 protein is additionally treated with a zwitter-ionic detergent.

88. (Currently Amended) The immunoassay kit method according to claim 87

wherein said HCV NS3 protein is treated with n-dodecyl-N,N-dimethylglycine as zwitter-

ionic detergent.

Claims 89-97 (Canceled)

98. (Currently Amended) The method according to claim 79 wherein said

desulphonation is performed in presence of a reducing agent is selected from DTT, DTE

or TCEP.

Claims 99-100. (Canceled)

101. (Previously Presented) The method according claim 98 wherein said

reducing agent is used in a concentration range of 0.1 mM to 1 M.

Claims 102-110. (Canceled)

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